

Abstract

To develop a helical synchronous belt for driving carriage that does not generate tracking
5 due to the effect of helical teeth, in order to prevent lower positioning accuracy, vibration associated
with reciprocating movement, and reduced durability of the belt as a result of contact with the flange
on the pulley's side face. The core cord twist angle of the helical synchronous belt is set to a value
opposing to the helical tooth angle, with the helical tooth angle set to 5° to 15°, and core cord twist
angle set to 15° to 2°.

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